

In the claims:

1. (previously presented) A hydrogel precursor composition comprising:

(a) a polymer comprising a water soluble polymer domain with at least two hydrophobic interacting groups attached thereto, wherein said hydrophobic interacting groups bind strongly to each other in an interchain manner to form a hydrogel under physiological conditions; and

(b) a physical chemical protecting group that inhibits gel formation of said polymer by preventing said hydrophobic interacting groups from binding strongly in an interchain manner.

2. (previously presented) A hydrogel or hydrogel precursor composition comprising:

(a) a polymer comprising a water soluble polymer domain with at least two hydrophobic interacting groups attached thereto, wherein said hydrophobic interacting groups bind strongly to each other in an interchain manner to form a hydrogel under physiological conditions;

(b) a physical chemical protecting group that inhibits gel formation of said polymer by preventing said hydrophobic interacting groups from binding strongly in an interchain manner; and

(c) a molecule that disrupts an interaction between said physical chemical protecting group and said hydrophobic interacting groups.